

## CLAIMS

We claim:

1. A method comprising:  
receiving an input through a graphical user interface;  
determining a data type, wherein the data type is associated with a set of  
configuration items, wherein each of the configuration items is represented  
in a markup language, and wherein the configuration items correspond to  
configuration data stored in an operation support system;  
selecting an operation based on the configuration item data type, wherein the  
operation is associated with the input; and  
performing the operation.
2. The method of claim 1, wherein the each of the configuration items is stored in a  
separate configuration item file.
3. The method of claim 2, wherein the determining the data type is based on content  
of the at least one of the separate configuration item files, and wherein the determining is  
based on a markup language schema or an XPath expression.
4. The method of claim 1, wherein the data type is associated with a data type  
definition, wherein the data type definition is one of a user-extendable set of data type  
definitions.
5. The method of claim 4, wherein the data type definition is represented in a  
markup language.
6. The method of claim 1, wherein the operation is one of a user-extendable set of  
operations associated with the data type.
7. A method comprising:

receiving a selection of a configuration item, wherein the configuration item is associated with a data type, and wherein the configuration item is represented in a markup language;  
selecting a first set of one or more operations from a second set of operations, wherein the selecting is based on the data type;  
presenting the first set of one or more operations;  
receiving a selection of an operation of the first set the one or more operations;  
and  
performing the operation.

8. The method of claim 7, wherein the configuration item is stored in an operations support system.
9. The method of claim 7, wherein the each of the configuration items is stored in a separate configuration item file.
10. The method of claim 7, wherein the data type is associated with a data type definition, wherein the data type definition is one of a user-extendable set of data type definitions.
11. The method of claim 10, wherein the data type definition is represented in a markup language.
12. The method of claim 7, wherein the first set of operations is a user-extendable set.
13. A method comprising:  
executing an interactive utility that is associated with a configuration item data type, wherein the executing includes,  
displaying a dialog box, wherein the dialog box includes one or more input fields;  
receiving data in one or more of the inputs fields; and  
inserting the data into a markup language representation of a configuration item, wherein the configuration item is of the configuration item data type.

14. The method of claim 13, wherein the interactive utility is on of a user-extendable set of interactive utilities.
15. The method of claim 13, wherein the configuration item data type is associated with a plurality of interactive utilities.
16. A method comprising:
  - determining a data type associated with one or more configuration items, wherein the one or more configuration items include a first set of property values, and wherein the one or more configuration items are associated with configuration data stored in an operations support system;
  - determining a second set of properties, wherein ones of the second set of properties are associated with the data type, and wherein ones of the second set of properties correspond with ones of the first set of property values;
  - presenting a property sheet, wherein the property sheet includes certain ones of the set of properties, and wherein the property sheet includes input fields associated with certain ones of the first set of property values;
  - receiving data in the input fields; and
  - modifying ones of the first set of property values based on the data.
17. The method of claim 16, wherein the second set of properties is a user-extendable set.
18. The method of claim 16, wherein the data type is associated with a data type definition, wherein the data type definition is one of a user-extendable set of data type definitions.
19. The method of claim 18, wherein the data type definition is represented in a markup language.
20. An apparatus comprising:

a data types module to determine a data type, wherein the data type is associated with a set of configuration items, wherein each of the configuration items is represented in a markup language, and wherein the configuration items correspond to configuration data stored in an operation support system;  
a system controller module to receive the data type from the data types module, wherein the system controller module is adapted to select an operation based on the data type, and wherein the system controller is adapted to perform the operation.

21. The apparatus of claim 20, wherein the each of the configuration items is stored in a separate configuration item file.

22. The apparatus of claim 21, wherein the determination of the data type is based on content of the at least one of the separate configuration item files, and wherein the determination of the data type is based on a markup language schema or an XPath expression.

23. The apparatus of claim 20, wherein the data type is associated with a data type definition, wherein the data type definition is one of a user-extendable set of data type definitions.

24. The apparatus of claim 23, wherein the data type definition is represented in a Extensible Markup Language.

25. A machine-readable medium that provides instructions, which when executed by a machine, cause the machine to perform operations comprising:

receiving an input through a graphical user interface;

determining a data type, wherein the data type is associated with a set of configuration items, wherein each of the configuration items is represented in a markup language, and wherein the configuration items correspond to configuration data stored in an operation support system;

selecting an operation based on the configuration item data type, wherein the operation is associated with the input; and

performing the operation.

26. The machine-readable medium of claim 25, wherein the each of the configuration items is stored in a separate configuration item file.

27. The machine-readable medium of claim 26, wherein the determining the data type is based on content of the at least one of the separate configuration item files, and wherein the determining is based on a markup language schema or an XPath expression.

28. The machine-readable medium of claim 25, wherein the data type is associated with a data type definition, wherein the data type definition is one of a user-extendable set of data type definitions.

29. The machine-readable medium of claim 28, wherein the data type definition is represented in a markup language.

30. The machine-readable medium of claim 25, wherein the operation is one of a user-extendable set of operations associated with the data type.

31. A machine-readable medium that provides instructions, which when executed by a machine, cause the machine to perform operations comprising:

receiving a selection of a configuration item, wherein the configuration item is associated with a data type, and wherein the configuration item is represented in a markup language;

selecting a first set of one or more operations from a second set of operations, wherein the selecting is based on the data type;

presenting the first set of one or more operations;

receiving a selection of an operation of the first set the one or more operations;

and

performing the operation.

32. The machine-readable medium of claim 31, wherein the configuration item is stored in an operations support system.

33. The machine-readable medium of claim 31, wherein the each of the configuration items is stored in a separate configuration item file.

34. The machine-readable medium of claim 31, wherein the data type is associated with a data type definition, wherein the data type definition is one of a user-extendable set of data type definitions.

35. The machine-readable medium of claim 34, wherein the data type definition is represented in a markup language.

36. The machine-readable medium of claim 31, wherein the first set of operations is a user-extendable set.

37. A machine-readable medium that provides instructions, which when executed by a machine, cause the machine to perform operations comprising:

- executing an interactive utility that is associated with a configuration item data type, wherein the executing includes,
  - displaying a dialog box, wherein the dialog box includes one or more input fields;
  - receiving data in one or more of the inputs fields; and
  - inserting the data into a markup language representation of a configuration item, wherein the configuration item is of the configuration item data type.

38. The machine-readable medium of claim 37, wherein the interactive utility is on of a user-extendable set of interactive utilities.

39. The machine-readable medium of claim 37, wherein the configuration item data type is associated with a plurality of interactive utilities.

40. A machine-readable medium that provides instructions, which when executed by a machine, cause the machine to perform operations comprising:

- determining a data type associated with one or more configuration items, wherein the one or more configuration items include a first set of attributes, and

wherein the one or more configuration items are associated with configuration data stored in an operations support system;  
determining a second set of properties, wherein ones of the second set of properties are associated with the data type, and wherein ones of the second set of properties correspond with ones of the first set of attributes;  
presenting a property sheet, wherein the property sheet includes certain ones of the set of properties, and wherein the property sheet includes input fields associated with certain ones of the first set of attributes;  
receiving data in the input fields; and  
modifying ones of the first set of attributes based on the data.

41. The machine-readable medium of claim 40, wherein the second set of properties is a user-extendable set.

42. The machine-readable medium of claim 40, wherein the data type is associated with a data type definition, wherein the data type definition is one of a user-extendable set of data type definitions.

43. The machine-readable medium of claim 42, wherein the data type definition is represented in a markup language.